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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,867	01/12/2001	Daniel R. Marshall	10002307-1	2416

7590 03/25/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

PEYTON, TAMMARA R

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HL

Office Action Summary

Application No.

09/759,867

Applicant(s)

MARSHALL, DANIEL R.

Examiner

Tammara R Peyton

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "similar to" in claims 27 is a relative term which renders the claim indefinite. The term "similar to" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonable apprised of the scope of the invention. The references in claim 26 to "each storage area", and in claim 27 to "emitter" has been rendered indefinite by the use of the term "similar to."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 11-30, and 34, are rejected under 35 U.S.C. 103(a) as being unpatentable over *Treyz et al.* (US 6,587,835) and *Gibson et al.* (US 5,557,596), filed as Prior Art, dated 03/31/03 and in further view of *VIPERS: The High Ground of 2025 (VIPERS)*.

3. As per claims 1 and 15, *Treyz* teaches a method of handling information comprising:

- storing electronically readable information including audio and visual media into a portable storage module (HCD, Figs. 1,2, and 4) including a memory component (74/76/78, col. 15, lines 8-10, Fig.4); and
- recalling selectively a portion of the electronically readable information from the memory component of the portable storage module into an information playback device (Fig. 2) for consumption by a user. (Abstract, col. 1, lines 41-col. 4, lines 1-10, col. 9, lines 56-col. 17, lines 59, col. 22, lines 43-col. 23, lines 1-7, col. 60, lines 57-67, col. 31, lines 20-65, col. 63, lines 1-12)

4. *Treyz* teaches a portable storage module that allows a user to electronically download and store audio and visual (i.e. videos, movies) information. Once the download is complete the user may then view the downloaded information via an internal display or transfer the downloaded information to another device for example an In-home electronic device (computer/television, Figs. 1,2) or an automobile computer (Figs. 2, 116).

5. *Treyz* teaches that the portable storage module includes a hard disk but other forms of storage could be used (col. 15, lines 8-10). However, *Treyz* is silent in respect to the storage component being an atomic resolution storage memory component. Applicant's specification explained an atomic resolution storage memory component as a non-volatile memory storage device capable of storing a large volume of data within a relatively small storage area such as a pendant. (Specification, pg. 4, lines 6-13) *Gibson* teaches the use of atomic resolution storage memory component (high density storage device) that is capable of storing a large volume of data within a relatively small storage area.

6. It would have been obvious to one of ordinary skill at the time the invention was made to replace *Treyz*' storage medium and implement *Gibson*'s atomic resolution storage memory component. Doing so would add and expand the flexibility to *Treyz*' portable storage module by increasing the storage density in *Treyz*' portable storage module without increasing the size of the memory component. (*Gibson*, col. 1, lines 52-63)

7. However, the *Treyz-Gibson* memory component is silent in respect to a size approximately one square millimeter, nonetheless, *Treyz-Gibson* teach wherein the atomic resolution storage memory component is capable of storing gigabytes of data. VIPERS discloses storage memories that provide multiple terabytes in one square millimeter size storage units as currently well known in

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the art. (VIPERS, page 6 of 12) One of ordinary skill would readily recognize that 1 terabytes is approximately 1000 gigabytes, therefore, it would have been obvious to one of ordinary skill that a memory component sized approximately one square millimeter that can store gigabytes of data is well known in the art.

8. It would have been obvious to one of ordinary skill at the time the invention was made to replace the *Treyz-Gibson* storage medium and implement *VIPERS*' one square millimeter size storage units. Doing so would add and expand the flexibility to *Treyz-Gibson*' portable storage module by gaining virtually unlimited memory storage capacity in miniature form. (*VIPERS*, pg.6)

9. As per claim 2, *Treyz-Gibson* teaches wherein the storing step further includes transferring the electronically readable information from an external information source (Figs. 1,2, *Treyz*) into the memory component of the portable storage module.

10. As per claim 3, *Treyz* teaches selecting at least one of a stationary entertainment library and an Internet website (col. 29, lines 15-20) as the external information source.

11. As per claim 4, *Treyz* teaches wherein the storing step further comprises:

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- providing multiple types of entertainments media as the electronically readable information;
- storing the entertainment media into the external information source; and providing the electronically readable information for user-initiated wireless transfer from the external information source to the portable storage module. (Abstract, col. 1, lines 41-col. 4, lines 1-10, col. 9, lines 56-col. 17, lines 59, col. 22, lines 43-col. 23, lines 1-7, col. 60, lines 57-67)

12. As per claim 5, *Treyz-Gibson-VIPERS* teaches of repeating the storing step to capture additional electronically readable information into the memory component of the storage module.

13. As per claim 6, *Treyz* teaches wherein the information playback device could be a computer. (col. 10, lines 45-52). One of ordinary skill would readily recognize that *Treyz-Gibson* would be motivated to utilize a notebook computer for its playback capabilities, because it would add and expand the flexibility of the portable storage device.

14. As per claim 7, *Treyz* teaches wherein the information playback device is an audio player (Fig.4).

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15. As per claim 8, *Treyz* teaches wherein the electronically readable information is at least one of a book, a music collection, and a movie. (col. 54, lines 6-10, 17-22 and col. 63, lines 1-12)

16. As per claim 11, *Treyz-Gibson* teaches the storing step that provides the storage module with a communication interface and obviously a power supply. (*Treyz*, Fig.4)

17. As per claims 12, 16; and 17, *Treyz* teaches of providing the communication interface with a wireless communication path including infrared or radio frequency paths. (*Treyz*, col. 49, lines 19-27)

18. As per claim 13, *Treyz-Gibson-VIPERS* teaches wherein the memory component further includes a controller for operating the portable storage device and communication between the memory component and the communication interface.

19. As per claim 14, *Treyz* obviously performs the storing step and the recalling step in a **broadband frequency format**. (*Treyz*, col. 49, lines 19-27)

20. As per claim 18, *Treyz* teaches wherein the information playback device could be a computer. One of ordinary skill would readily recognize that most computers comprises at least one of a microphone, a speaker, an input keypad,

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and a display for communicating with the atomic resolution storage memory component of the storage device via the communication interface.

21. As per claims 19 and 23, *Treyz-Gibson* teaches wherein the storage device further includes a logic controller. Furthermore, *Gibson* teaches of a controller located on the atomic resolution storage device.

22. As per claims 20 and 21, *Treyz* teaches wherein the entertainment packet includes at least one audio element and that the audio element is a music CD.

23. As per claim 22, *Treyz* teaches wherein the entertainment packet includes at least one printed media in the form of electronic audio book.

24. As per claim 24, *Gibson* teaches wherein the atomic resolution storage memory component further comprises:

- a field emitter (102, 104, Fig. 1a) fabricated by semiconductor microfabrication techniques capable of generating an electron beam current; (col. 2, lines 27-30) and
- a storage medium (106, 108, Fig. 1a) in proximity to the field emitter and having a storage area in one of a plurality of states to represent the information stored in the storage area. (*Gibson*, col. 2, lines 1-26, col. 3, lines 15-20, col. 5, lines 65-67, col. 9, lines 1-11)

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25. As per claim 25, *Gibson* teaches wherein an effect is generated when the electron beam current bombards the storage area, wherein the magnitude of the effect depends upon the state of the storage area, and wherein the information stored in a storage area is read by measuring the magnitude of the effect.

(*Gibson*, col. 2, lines 15-19, col. 5, lines 67-col. 6, lines 1-9, col. 9, lines 1-11)

26. As per claim 26, *Gibson* teaches wherein the atomic resolution storage memory component further comprises:

- a plurality of storage areas on the storage medium (106, 108, Fig. 1a), with each storage area being similar to the one recited in claim 24; and
- a microfabricated mover (110, Fig. 1a) in the storage device to position different storage areas to be bombarded by the electron beam current.

(*Gibson*, col. 2, lines 1-30, col. 3, lines 15-20, col. 5, lines 65-67)

27. As per claim 27, *Gibson* teaches wherein the atomic resolution storage device further comprises:

- a plurality of field emitters, with each emitter being similar to the one recited in claim 24, the plurality of field emitters being spaced apart, with each emitter being responsible for a number of storage areas on the storage medium; and
- such that a plurality of the field emitter can work in parallel to increase the data rate of the storage device.

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28. As per claim 28, *Gibson-Treyz* teaches a housing that encloses the storage device (*Gibson*, Fig.1a) and the communication interface (*Treyz*, Fig.4).

29. As per claim 29, *Treyz-Gibson-VIPERS* teach an information transfer and consumption system comprising:

- a portable entertainment media storage module (*Treyz*, HCD, Figs. 1,2, and 4) comprising:
 - an storage device (*Treyz*, 74/76/78, col. 15, lines 8-10, Fig.4) capable of storing at least one entertainment media packet which includes audio and visual media; and
 - a communication interface for communicating to and from the storage device;
- an information library of multiples types of entertainment media stored as electronically readable information including:
 - a master memory module storing a collection of entertainment media; and
 - a communication interface for selectively transferring a copy of a selection of the entertainment media collection from the information library to the storage device of the portable entertainment media storage modules; and
- an entertainment media playback device for retrieving the entertainment media from the storage device of the module and for making the entertainment media available in a consumable format.

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(*Treyz*, Abstract, col. 1, lines 41-col. 4, lines 1-10, col. 9, lines 56-col. 17, lines 59, col. 22, lines 43-col. 23, lines 1-7, col. 60, lines 57-67, *Gibson*, col. 1, lines 52-63, *VIPERS*, pg.6)

30. As per claim 30, *Treyz-Gibson-VIPERS* teaches a method of distributing books in electronically readable format, comprising;

providing an entertainment library being located in a public venue (*Treyz*, 26, 22, 18, etc..., Fig.1) and having a selection of books (audio) in electronically readable format;

providing a portable storage module including a memory component sized approximately one square millimeter and capable of storage gigabytes of data with a display (82, Fig. 4);

selecting at least one book (i.e., in the form of text, graphics, audio, and video, *Treyz*, col. 54, lines 6-10, 17-22) from the entertainment library with the portable storage module;

downloading the selected book in electronically readable format from the entertainment library to the portable storage module; and

display at least a portion of the selected book on the display.

31. As per claim 34, *Treyz-Gibson-VIPERS* teaches of distributing movies in electronic format, comprising;

providing an entertainment library being located in a public venue and having a selection of movies in electronic format;

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providing a portable storage module including a memory component sized approximately one square millimeter and capable of storage gigabytes of data with a display;

selecting at least one movie (col. 60, lines 7-9) from the entertainment library with the portable storage module;

downloading the selected movie in electronic format from the entertainment library to the portable storage module; and

displaying at least a portion of the selected movie on the display.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 10, 31-33, and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Frenkiel et al.* (US 2002/0198958) and *Gibson et al.* (US 5,557,596) and in further view of *VIPERS: The High Ground of 2025* (VIPERS) as applied to claims 1-29, 30, and 34 above, and further in view of *Gioscia et al.*, (WO 00/30117).

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31. As per claims 9, 10, 31-33 and 35-37, *Gibson* does not expressly teach containing the portable module within a housing and wearing the housing storage module on or about the body of a user. However, one of ordinary skill would readily recognize that *Gibson* teaches that the atomic resolution memory storage that is capable of storing a large volume of data within a relatively small storage area; and, *Treyz*' portable storage module could be a cellular phone, which would be small enough for the user to carry on or about the body. Neither *Treyz* nor *Gibson-VIPERS* expressly teaches wherein the portable storage module is implemented in a wristwatch, a neck worn pendent, a bracelet, or a pair of eyeglasses. Nonetheless, *Gioscia* teaches (pg. 9, lines 8-23) arranging a portable storage module within a wristwatch or a clip that can be worn on the user. However, *Gioscia* does not teach of arranging the storage module within a neck worn pendent, a bracelet, a cellular phone, or a pair of eyeglasses. Nonetheless, it would have been obvious to one of ordinary skill at the time the invention was made that it would not be out of the scope of *Gioscia*'s portable storage module to be implemented in a neck worn pendent, a bracelet, a pair of eyeglasses; because, *Gioscia* already teaches of implementing the portable storage module in a way that can be worn by the user.

It would have been obvious to one of ordinary skill at the time the invention was made that it would not be out of the scope of *Treyz-Gibson-VIPERS* to implement the portable storage module similar to *Gioscia*'s portable storage module and not depart from the *Treyz-Gibson-VIPERS* inventive concept, because doing so would add and expand the flexibility of the *Treyz-Gibson-*

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VIPERS portable storage module that previously taught that the portable storage module (cellular phone) could be small enough for the user to carry on or about the body.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (571) 272-4157. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin, can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718. Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks

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Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT") sent to:

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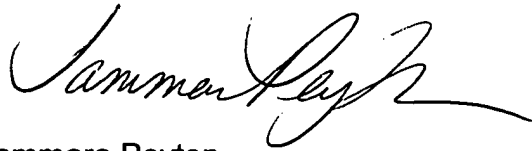
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Hand-delivered responses should be brought to:

USTPO, 2011 South Clark Place, Customer Window

Crystal Plaza Two, Lobby Room 1B03, Arlington, VA, 22202Crystal Park II,

2121.

A handwritten signature in black ink, appearing to read "Tammara Peyton", with a stylized flourish at the end.

Tammara Peyton

March 21, 2005